GENERAL	
Description	The plan of action to direct and enforce the activities of Problem Management, in a controlled manner, to meet required levels of service.
Purpose	The purpose of this policy is to establish a Problem Management policy for The Fermilab Computing Division. The intent is to ensure that problems are identified and investigated, resulting in root causes, workarounds, and known errors for which resolution will reduce the level of incidents in the environment. This policy requires that Problem Management (PM) is performed in accordance with established PM procedures and to ensure that controlled and stable baselines are established for managing problems, and restoring or improving IT services.
Applicable to	*Problem Management as it relates to the ISO20000 initiative*
Supersedes	*N/A*

Document Owner	*Problem Manager*	**Owner Org**	*Computing Division*
Effective Dates	*7-01-2009 to 07-01-2010*	**Revision Date**	*06-24-2009*

VERSION HISTORY			
Version	**Date**	**Author(s)**	**Change Summary**
1.0	6/24/09	Gerald Guglielmo, Problem Coordinators, David Whitten – Plexent LLP	Initial document

Table of Contents

1.0 Scope

The scope of the Problem Management Policy applies equally to all individuals in the Computing Division and includes management of the events that are not part of the standard operation of a service and cause or may cause an interruption to or a reduction in, the quality of service established in Fermilab IT SLAs. The process and procedures in Problem Management are applied to:

- Service Desk calls which require the involvement of Problem Management

- First, Second, and third-line support

- Escalation

- Priority

- Relationship between Incidents, Problems, Known Errors and Requests for Change

Out of scope items for this process include:

- Request for additional service(s)

- Requests that fall under the Request Fulfillment Process or Standard Change Process

- Development of standard Service Level Management procedures for handling Problems

2.0 Policy

Problem management shall be performed in accordance with an established Problem Management process and set of procedures. The process and procedures must cover:

- Proactive Problem Management

- Restoration of Normal Service Operations

- Root Cause Analysis

- Trending analysis

- Workarounds

- Interfaces (e.g., Incident, Change, Availability, Service Desk, etc.)

Problem Management activities must be based on the established process and set of procedures referenced in this document. They include:

- Proactive Problem Management

- Detection and Logging

- Classification

- Investigation and Diagnosis

- Error Control

2.0 Policy

- Problem Closure

- Continuous Process Improvement

Problem Management (Problem Manager and the Problem Coordinators) has the authority to assign Problem Records to the appropriate service support teams

- Problems must be addressed in a timeframe agreed upon between Problem Management and the Service Owner
- Problem Management has the authority to escalate any non-responsiveness for problem assignments to senior management

3.0 Goal

The goal of problem management is to contribute to the mission of the laboratory by providing the highest possible levels of IT Service availability through minimization of the impact of Incidents and Problems within the environment by:

- Proactive prevention of Incidents and Problems

- Elimination of recurring Incidents

- Understanding the root cause of Incidents so that corrective action can be undertaken

In order to achieve this goal, Problem Management seeks to establish the root cause of incidents and then initiate actions to improve or correct the situation.

The objectives of Problem Management are to:

- Identify and take ownership of problems affecting infrastructure and service.

- Take steps to reduce the impact of incidents and problems.

- Identify the root cause of problems and initiate activity aimed at establishing workarounds or permanent solutions to these identified problems.

- Using recorded problem and incident data, perform trend analysis to predict future problems and enable prioritization and implementation of problem management activity.

The Problem Management process has both reactive and proactive aspects. The reactive elements provide direct support to the day-to-day operational activities of other service management functions, such as incident management, and are concerned with initiating activity aimed at resolving problems in response to one or more incidents currently causing issues. Proactive Problem Management is concerned with identifying and mitigating problems and known errors before incidents occur.

4.0 Enforcement

Individuals who violate this policy may be subject to disciplinary actions.

5.0 Associated Documents

Document Name	Description	Relationship
Fermilab Problem Management Policy	Policy	This document
Fermilab Problem Management Process and Procedures	Process	Process document
Problem Management Process Metrics	Performance Management Metrics	Performance metrics in the Fermilab Problem Management Process and Procedures document
Fermilab Incident Management Process and Procedures Appendix 11	Severity Table and Escalation Table	Priority and Urgency guidelines
Fermilab Communication and Awareness Plan	Communication Plan	Communication
Fermilab Problem Management Policy	Policy	This document
Fermilab Problem Management Process and Procedures	Process	Process document

6.0 Definitions	
Term / Acronym	**Definition**
Normal Service Operation	Service operation within Service level agreement (SLA) limits.
Incident	any event which is not part of the standard operation of a service and which causes, or may cause, an interruption to, or a reduction in, the quality of that service.
Service Request	Every Incident not being a failure in the IT Infrastructure.
SLA	Service Level Agreement - A written agreement between a service provider and Customer(s) that documents agreed service levels for a service.
Problem	The unknown, underlying cause of one or more incidents.
Urgency	Measure of the business criticality of an Incident or Problem based on the impact and on the business needs of the Customer.
Classification	Process of formally identifying Incidents, Problems, and Known Errors by origin, symptoms, and cause.
Known Error	Is a condition identified by successful diagnosis of the root cause of a problem, and the subsequent development of a Work-around or permanent solution?
Work-around	Reduces impact of an incident for which full resolution is not yet available